## PCT 371 Routing Sheet APPLICATION

IFW DocCode - SEQREQ
Index using Current Date

10/599,313

# TO BE DELIVERED TO: Tech Center Scanning

### Sequence Rule Compliance Review Item

|   | CRF, paper copy of sequence listing, and statement that both are same missing |
|---|---|
| X | CRF contains error(s) according to STIC Report                                |
|   | CRF damaged or unreadable according to STIC Report                            |
|   | CRF transferred from prior application is not compliant                       |

Place an "X" in the appropriate box

#### **Comment Sheet**

### APPLICATION SERIAL NUMBER 10/559,313

### DOES NOT COMPLY WITH THE SEQUENCE RULES. See reasons below.

The sequence listing filed by the Applicant on September 29, 2006 could not be accepted by STIC (please see attached comment from STIC, dated October 03, 2006).

#### STIC Biotechnology Systems Branch

#### RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

<u>Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:</u>

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
   Alexandria, VA 22314

Revised 01/10/06



**IFWO** 

RAW SEQUENCE LISTING

DATE: 10/03/2006

PATENT APPLICATION: US/10/599,313

2 <110> APPLICANT: POSCO

/599,313 TIME: 10:20:32

Input Set : A:\20010-06USA.ST25.txt

Output Set: N:\CRF4\10032006\J599313.raw \*

```
POSTECH Foundation
              CHA, Hyung Joon
              HWANG, Dong Soo
       7 <120> TITLE OF INVENTION: Mussel Bioadhesive
       9 <130> FILE REFERENCE: 20010-06USA
      11 <140> CURRENT APPLICATION NUMBER: US 10/599,313
 C--> 12 <141> CURRENT FILING DATE: 2006-09-25
      14 <150> PRIOR APPLICATION NUMBER: PCT/KR2005/000888
      15 <151> PRIOR FILING DATE: 2005-03-25
17 <150> PRIOR APPLICATION NUMBER: US 60/556,805
                                                            Megg Not Comply
      18 <151> PRIOR FILING DATE: 2004-03-26
                                                            Cornoted Diskette Needed
      20 <160> NUMBER OF SEQ ID NOS: 35
      22 <170> SOFTWARE: KopatentIn 1.71
      24 <210> SEQ ID NO: 1
      25 <211> LENGTH: 30
      26 <212> TYPE: DNA
      27 <213> ORGANISM: Artificial Sequence
      29 <220> FEATURE:
      30 <223> OTHER INFORMATION: primer
      33 <400> SEQUENCE: 1
      34 ggcctgcagc agttctgaag aatacaaggg
                                                                                  30
      37 <210> SEQ ID NO: 2
      38 <211> LENGTH: 29
      39 <212> TYPE: DNA
      40 <213> ORGANISM: Artificial Sequence
      42 <220> FEATURE:
      43 <223> OTHER INFORMATION: primer
      46 <400> SEQUENCE: 2
                                                                                   29
      47 gtagatctat acgccggacc agtgaacag
      50 <210> SEQ ID NO: 3
      51 <211> LENGTH: 21
      52 <212> TYPE: DNA
      53 <213> ORGANISM: Artificial Sequence
      55 <220> FEATURE:
      56 <223> OTHER INFORMATION: primer
      59 <400> SEQUENCE: 3
                                                                                   21
      60 cttqtatttt ccgctgtttt t
      63 <210> SEQ ID NO: 4
      64 <211> LENGTH: 21
      65 <212> TYPE: DNA
      66 <213> ORGANISM: Artificial Sequence
      68 <220> FEATURE:
```

RAW SEQUENCE LISTING DATE: 10/03/2006 PATENT APPLICATION: US/10/599,313 TIME: 10:20:32

Input Set : A:\20010-06USA.ST25.txt
Output Set: N:\CRF4\10032006\J599313.raw

```
69 <223> OTHER INFORMATION: primer
  72 <400> SEQUENCE: 4
                                                                              21
  73 aaaaacagcg gaaaatacaa g
  76 <210> SEQ ID NO: 5
  77 <211> LENGTH: 228
  78 <212> TYPE: DNA
  79 <213> QRGANISM: Mytilus galloprovincialis
  81 <220> FEATURE:
  82 <221> NAME/KEY: CDS
  83 <222> LOCATION: (1)..(228)
  84 <223> OTHER INFORMATION: Mytilus galloprovincialis foot protein-5 cDNA
  87 <400> SEQUENCE: 5
                                                                              48
  88 agt tet gaa gaa tac aaa ggt ggt tat tac eca ggc aat act tac cac
  89 Ser Ser Glu Glu Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Thr Tyr His
                                         10
  90 1
  92 tat cat tca ggt ggt agt tat cac gga tcc ggc tat cat gga gga tat
  93 Tyr His Ser Gly Gly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr
                                     25
                 20
                                                                             174
. . .96 aag gga aag tat tac gga aag gca aag aaa tac tat aaa tat aaa
  97 Lys Gly Lys-Tyr Tyr Gly Lys Aia Lys Lys Tyr Tyr Tyr Lys Tyr Lys
              35
                                  40
  100 aac agc gga aaa tac aag tat ctg aag aaa gct aga aaa tac cat aga
                                                                              192
  101 Asn Ser Gly Lys Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg
                              55
                                                                              228
  104 aag ggt tac aag aag tat tat gga ggt ggt agc agt
  105 Lys Gly Tyr Lys Lys Tyr Tyr Gly Gly Gly Ser Ser
  106 65
                           70
  109 <210> SEQ ID NO: 6
  110 <211> LENGTH: 76
  111 <212> TYPE: PRT
  112 <213> ORGANISM: Mytilus galloprovincialis
  114 <400> SEQUENCE: 6
  115 Ser Ser Glu Glu Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Thr Tyr His
                                                   10
 - 118 Tyr His Ser Gly Gly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr
                                                          30
                  20
                                       25
  121 Lys Gly Lys Tyr Tyr Gly Lys Ala Lys Lys Tyr Tyr Tyr Lys
               35
                                   40
  124 Asn Ser Gly Lys Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg
                                                  60
                              55
  127 Lys Gly Tyr Lys Lys Tyr Tyr Gly Gly Gly Ser Ser
  128 65
                           70
  131 <210> SEQ ID NO: 7
  132 <211> LENGTH: 180
  133 <212> TYPE: DNA
  134 <213> ORGANISM: mytilus edulis
  136 <220> FEATURE:
  137 <221> NAME/KEY: CDS
  138 <222> LOCATION: (1)..(180)
```

RAW SEQUENCE LISTING . DATE: 10/03/2006
PATENT APPLICATION: US/10/599,313 TIME: 10:20:32

Input Set : A:\20010-06USA.ST25.txt
Output Set: N:\CRF4\10032006\J599313.raw

```
139 <223> OTHER INFORMATION: 6 times repeated sequence derived from mytilus edulis foot
              protein-1
      143 <400> SEQUENCE: 7
      144 get aaa eeg tet tae eeg eeg ace tae aaa gea aaa eee teg tae eea
                                                                                     48
      145 Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro
                           5
                                               10
      148 ccq act tat aag gct aaa cct agc tat cca cct acg tac aaa gct aaa
or Time 149 Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys
      152 ccg tct tac ccg ccg act tac aaa gca aaa ccg tcc tac cct ccg acc
      153 Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr
                                       40
      156 tat aag gct aaa ccg agt tac ccc ccg act tac aaa
                                                                                    180
      157 Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys
               50
                                   55
      161 <210> SEQ ID NO: 8
      162 <211> LENGTH: 60
      163 <212> TYPE: PRT
     ..164 <213> ORGANISM: mytilus edulis
      166 <400> SEQUENCE: 8
      167 Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro
                                               10
      170 Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys
                                           25
                       20
      173 Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr
                  35
                                       40
      176 Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys
              50
                                   55
      180 <210> SEQ ID NO: 9
      181 <211> LENGTH: 411
      182 <212> TYPE: DNA
      183 <213> ORGANISM/ Artificial Sequence
      185 <220> FEATURE:
      186 <223> OTHER INFORMATION Broadhesive protein (mgfp-150) coding_sequence
      189 <220> FEATURE:
      190 <221> NAME/KEY: CDS
      191 <222> LOCATION: (1)..(411)
      192 <223> OTHER INFORMATION: Bioadhesive protein(mgfp-150)
      195 <400> SEQUENCE: 9
      196 gct aaa ccg tct tac ccg ccg acc tac aaa gca aaa ccc tcg tac cca
      197 Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro
                                               10
      200 ccg act tat aag gct aaa cct agc tat cca cct acg tac aaa gct aaa
      201 Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys
      202 .
                       20
                                           25
      204 ccg tct tac ccg ccg act tac aaa gca aaa ccg tcc tac cct ccg acc
      205 Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr
                                                            45
                   35
                                       40
```

192

208 tat aag get aaa eeg agt tae eee eeg aet tae aaa agt tet gaa gaa

DATE: 10/03/2006

```
RAW SEQUENCE LISTING
                    PATENT APPLICATION: US/10/599,313
                                                             TIME: 10:20:32
                    Input Set : A:\20010-06USA.ST25.txt
                    Output Set: N:\CRF4\10032006\J599313.raw
    209 Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ser Ser Glu Glu
                                  55
                                                                                   240
     212 tac aag ggt ggt tat tac cca ggc aat tcg aac cac tat cat tca ggt
     213 Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Ser Asn His Tyr His Ser Gly
                              70
     214 65
     216 ggt agt tat cac gga tcc ggc tac cat gga gga tat aag gga aag tat
                                                                                   288
     217. Cly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr Lys Gly Lys Tyr
            * / * ... * * 85*
                                                           90
     220 tac gga aag gca aag aaa tac tat tat aaa tat aaa aac agc gga aaa
                                                                                   336
     221 Tyr Gly Lys Ala Lys Lys Tyr Tyr Lys Tyr Lys Asn Ser Gly Lys
                    100
                                         105
     224 tac aag tat cta aag aaa gct aga aaa tac cat aga aag ggt tac aag
                                                                                   384
     225 Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg Lys Gly Tyr Lys
                                                         125
     228 aag tat tat gga ggt agc agt gaa ttc
     229 Lys Tyr Tyr Gly Gly Ser Ser Glu Phe
            130
     233 <210> SEQ ID NO: 10
    .234 <21:1> LENGTH: 137
     235 <212> TYPE: PRT
     236 2135 ORGANISM: Artificial Sequence
W--> 23/8 <220> FEATURE:
W--> 238 <223> OTHER INFORMATION:
W--> 238 <400> 10-
     239 Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro
                                                                   15
                                              10
     242 Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys-
                                                              30
                                          25
                     20
     245 Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr
                                                          45
                                      40
     248 Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ser Ser Glu Glu
             50
                                  55
                                                      60
     251 Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Ser Asn His Tyr His Ser Gly
                                                  75
                              70
     254 Gly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr Lys Gly Lys Tyr
                                              90
                          85
     257 Tyr Gly Lys Ala Lys Lys Tyr Tyr Lys Tyr Lys Asn Ser Gly Lys
                    100
                                         105
                                                              110
     258
     260 Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg Lys Gly Tyr Lys
                                     120
                                                          125
                115
     263 Lys Tyr Tyr Gly Gly Ser Ser Glu Phe
     264
             130
                                 135
     267 <210> SEQ ID NO: 11
     268 <211> LENGTH: 411
     269 <212> TYPE: DNA
     270 <213> ORGANISM. Artificial Sequence
     272 <220> FEATURE $
                                                          Response

Response

See ennon

explanation 10/3/2006
     273 <223> OTHER INFORMATION (Bioadhesive protein (mgfp-051) coding sequence)
     276 <220> FEATURE:
```

file://C:\CRF4\Outhold\VsrJ599313.htm

RAW SEQUENCE LISTING DATE: 10/03/2006

PATENT APPLICATION: US/10/599,313 TIME: 10:20:32

Input Set: A:\20010-06USA.ST25.txt
Output Set: N:\CRF4\10032006\J599313.raw

```
277 <221> NAME/KEY: CDS
    278 <222> LOCATION: (1)..(411)
    279 <223> OTHER INFORMATION: Bioadhesive protein(mgfp-051)
    282 <400> SEQUENCE: 11
    283 agt tot gaa gaa tac aag ggt ggt tat tac cca ggc aat tog aac cac
                                                                                   48
    284 Ser Ser Glu Glu Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Ser Asn His
                         5 ,
    287 tat cat toa ggt ggt agt tat cac gga toc ggc tac cat gga gga tat
                                                                                 · ·96
    288 Tyr His Ser Gly Gly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr
                                         25
                     20
    291 aag gga aag tat tac gga aag gca aag aaa tac tat tat aaa tat aaa
                                                                                  144
    292 Lys Gly Lys Tyr Tyr Gly Lys Ala Lys Lys Tyr Tyr Tyr Lys Tyr Lys
                 35
                                     40
    295 aac agc gga aaa tac aag tat cta aag aaa gct aga aaa tac cat aga
                                                                                  192
    296 Asn Ser Gly Lys Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg
                                 55
             50
                                                                                  240
     299 aag ggt tac aag aag tat tat gga ggt agc agt gaa ttc gct aaa ccg
     300 Lys Gly Tyr Lys Lys Tyr Tyr Gly Gly Ser Ser Glu Phe Ala Lys Pro
                                              .. 75 ... 80
                             70 .
    301 65.
     303 tet tac eeg eeg ace tac aaa geäraaa eee teg tac eea eeg act tat
                                                                                  288
     304 Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr
                         85
     307 aag get aaa eet age tat eea eet aeg tae aaa get aaa eeg tet tae
                                                                                  336
     308 Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr
                                         105
                    100
     311 ccg ccg act tac aaa gca aaa ccg tcc tac cct ccg acc tat aag gct
                                                                                  384
     312 Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr Lys Ala
                                                                            material.

Le ennon

Xplanation

Spoogelo.
     315 aaa ccg agt tac ccc ccg act tac aaa
     316 Lys Pro Ser Tyr Pro Pro Thr Tyr Lys
                                                    18 explain 5
            130
     320 <210> SEQ ID NO: 12
     321 <211> LENGTH: 137
     322 <212> TYPE: PRT/
    - 323 <213 - ORGANISM: Artificial Sequence
  -> 325/<220> FEATURE:
  -> 325(<223> OTHER INFORMATION:
W--> 325 <400> 12_
     326 Ser Ser Glu Glu Tyr Lys Gly Gly Tyr Tyr Pro Gly Asn Ser Asn His
                                                                  15
                                              10
     329 Tyr His Ser Gly Gly Ser Tyr His Gly Ser Gly Tyr His Gly Gly Tyr
                                                              30
                     20
                                          25
     332 Lys Gly Lys Tyr Tyr Gly Lys Ala Lys Lys Tyr Tyr Tyr Lys Tyr Lys
                                                          45
                                      40
     335 Asn Ser Gly Lys Tyr Lys Tyr Leu Lys Lys Ala Arg Lys Tyr His Arg
                                  55
     338 Lys Gly Tyr Lys Lys Tyr Tyr Gly Gly Ser Ser Glu Phe Ala Lys Pro
                                                  75
                              70
     341 Ser Tyr Pro Pro Thr Tyr Lys Ala Lys Pro Ser Tyr Pro Pro Thr Tyr
```

The type of errors shown exist throughout the Saquence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/599,313

DATE: 10/03/2006 TIME: 10:20:33

Input Set : A:\20010-06USA.ST25.txt

Output Set: N:\CRF4\10032006\J599313.raw

Use of <220> Feature (NEW RULES): YYY OVER Sequence (s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223>

section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32)

(Sec.1.823 of new Rules)

Seq#:10,12,14,16,18,20,22

VERIFICATION SUMMARY DATE: 10/03/2006
PATENT APPLICATION: US/10/599,313 TIME: 10:20:33

Input Set : A:\20010-06USA.ST25.txt
Output Set: N:\CRF4\10032006\J599313.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:238 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:10, <213> ORGANISM: Artificial Sequence L:238 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213> ORGANISM: Artificial Sequence L:238 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:238 L:325 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:12, <213> and the second second ORGANISM: Artificial Sequence L:325 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:12, <213> ORGANISM: Artificial Sequence L:325 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:325 L:428 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:14, <213> ORGANISM: Artificial Sequence L:428 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213> ORGANISM:Artificial Sequence L:428 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:428 L:524 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:16, <213> ORGANISM: Artificial Sequence L:524 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16; <213> \*\*\* \* ORGANISM: Artificial Sequence L:524 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:524 L:613 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:18, <213> ORGANISM: Artificial Sequence L:613 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:18, <213> ORGANISM: Artificial Sequence L:613 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:18, Line#:613 L:715 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:20, <213> ORGANISM: Artificial Sequence L:715 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:20, <213> ORGANISM: Artificial Sequence L:715 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:715 L:832 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:22, <213> ORGANISM: Artificial Sequence L:832 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:22, <213>... ORGANISM: Artificial Sequence L:832 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:22,Line#:832